



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/881,264

06/14/2001

Kie-Hsiung Yang

3158/0J461

6651

7590

08/20/2004

Daniel R. McClure

Thomas, Kayden, Horstemeyer & Risley, L.L.P.

100 Galleria Parkway

Suite 1750

Atlanta, GA 30339

EXAMINER

LOUIE, WAI SING

ART UNIT

PAPER NUMBER

2814

DATE MAILED: 08/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/881,264	Applicant(s) YANG, KIE-HSIUNG	
	Examiner Wai-Sing Louie	Art Unit 2814	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,8,13,25 and 33 is/are rejected.
- 7) ☒ Claim(s) 2-7,9-12,14-24 and 26-32 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>8/15/03</u> . | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 8, 13, 25, and 33 are rejected under 35 U.S.C. 102(e) as being anticipated by Lee et al. (US 6,449,027).

With regard to claim 1, Lee et al. disclose an in plane switching mode liquid crystal display, IPS-LCD, (col. 4, line 66 to col. 6, line 10 and fig. 3) comprising:

- a comb-shaped common electrode 21 having a bar extending transversely and a plurality of rectangular teeth 21a extending in a first lengthwise direction from the bar (col. 4, lines 8-19 and fig. 3);
- a comb-shaped pixel electrode 28 having a bar extending transversely and a plurality of rectangular teeth 28a, 28b, and 28c extending in a second lengthwise direction from the bar, where each tooth has a continuous angle-shaped sidewall (fig. 4) and parallel is disposed between adjacent teeth of the common electrode (col. 4, lines 38-47 and fig. 3).

With regard to claims 8 and 33, Lee et al. disclose each teeth of the pixel electrode is ITO (col. 2, lines 17-19).

With regard to claim 13, Lee et al. disclose an in plane switching mode liquid crystal display (IPS-LCD) comprising:

- a comb-shaped common electrode 21 having a bar extending transversely and a plurality of teeth 21a extending in a first lengthwise direction from the bar, where each tooth has a continuous angle-shaped sidewall (col. 4, lines 8-19 and fig. 3 and 4).
- a comb-shaped pixel electrode 28 having a bar extending transversely and a plurality of rectangular-shaped teeth 28a, 28b, and 28c extending in a second lengthwise direction from the bar, where each tooth of the pixel electrode parallel is disposed between adjacent teeth of the common electrode (col. 4, lines 38-47 and fig. 3).

With regard to claim 25, Lee et al. disclose an in plane switching mode liquid crystal display (IPS-LCD) comprising:

- a comb-shaped common electrode 21 having a bar extending transversely and a plurality of teeth 21a extending in a first lengthwise direction from the bar, where each tooth has a continuous angle-shaped sidewall (col. 4, lines 8-19 and fig. 3 and 4).
- a comb-shaped pixel electrode 28 having a bar extending transversely and a plurality of rectangular teeth 28a, 28b, and 28c extending in a second lengthwise direction from the bar, where each tooth has a continuous angle-shaped sidewall (fig. 4) and parallel is disposed between adjacent teeth of the common electrode (col. 4, lines 38-47 and fig. 3 and 4).

*Allowable Subject Matter*

Claims 2-7, 9-12, 14-24, and 26-32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance:

Reference Lee et al. do not disclose the pixel electrode 28 is formed by lengthwise linking of a plurality of trapezoids, where the base length  $D2 \leq (D1 \pm 50 \text{ }\mu\text{m})$ , the trapezoids are connected by rectangular strip, and the common electrode 21 is ITO.

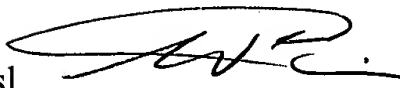
Therefore, the above references do not disclose the claimed invention of present application and claims 2-7, 9-12, 14-24, and 26-32 are allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wai-Sing Louie whose telephone number is (571) 272-1709. The examiner can normally be reached on 7:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael Fahmy can be reached on (571) 272-1705. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
wsl  
August 16, 2004.

  
LONG PHAM  
PRIMARY EXAMINER